

# Section E

## Nuclear Facility D&D, Remainder of Hanford (RL-0040)



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## PROJECT SUMMARY

### American Recovery and Reinvestment Act (ARRA)

Shipped three TRU Standard Waste Boxes (SWBs) to the Central Waste Complex (CWC) Complex.

Completed demolition of the 209E Critical Mass Lab.

### Base

Completed Annual Surveillance of Redox facilities. Completed 24 of 24 scheduled preventative maintenance (PM) and surveillances as well as 3 additional surveillances/PMs from previous months

Completed annual surveillance of Redox facilities.

Completed replacement of PUREX uninterruptible power supply (UPS) battery cell.

## EMS Objectives and Target Status

Objective #	Objective	Target	Due Date	Status
12-EMS-D&D-OB1-T1	Reduce the generation and release of toxic and hazardous chemicals and material.	Improve the spill prevention program to reduce the likelihood of spills by using spill prevention techniques, procedures, and surveillances.	9/30/12	

## TARGET ZERO PERFORMANCE

	CM Quantity	Rolling 12 Month	Comment
Days Away, Restricted or Transferred	0	2	N/A
Total Recordable Injuries	0	8	N/A
First Aid Cases	0	53	N/A
Near-Misses	0	0	N/A



## KEY ACCOMPLISHMENTS

### ARRA – U Plant/Other Decontamination and Decommissioning (D&D)

- 209E Project
  - Completed the demolition of the 209E Critical Mass Lab

### Outer Zone D&D

#### Base

- Completed annual surveillance of Redox facilities. Completed 24 of 24 scheduled PMs and surveillances as well as three additional surveillances/PMs from previous months.

## MAJOR ISSUES

**Issue:** The final end state of 6652L needs to be provided by RL so the planning on how to proceed can be started. This is specifically regarding the significant amount of asbestos left in the facility.

**Corrective Action:** Definition of end state/regulatory agreements is required in writing.

**Status:** Work is on hold until end state decision can be made, which also impacts the estimate and schedule for the project.

## RISK MANAGEMENT STATUS

Unassigned Risk  
Risk Passed  
New Risk

● Working - No Concerns  
● Working - Concern  
● Working - Critical

↕ Increased Confidence  
↔ No Change  
↕ Decreased Confidence

Risk Title	Risk Strategy/Handling	Assessment		Comments
		Month	Trend	
D4-043: Unforeseen Facility Event Impacts Safety or Environment	Unexpected event, including contamination or chemical spread, fire, industrial accident, structural degradation, etc., requires immediate D&D of a small to medium sized facility or requires unplanned facility repairs. Current management of the shutdown facilities includes corrective maintenance based upon historic experience.	●	↔	Continuing corrective maintenance activities. No unplanned events encountered.
WSR-047: Unforeseen Waste Site Event	Unforeseen waste site event, including contamination or chemical spread, fire, industrial accident, structural degradation, etc. requires immediate disposition or modification to a waste site. Routine surveillance and maintenance of the waste sites, including herbicide applications, is designed to protect workers and the environment.	●	↔	Continuing waste site inspections & surveillances. No unplanned events encountered.
D4-036: Readiness Reviews Required	Probability of risk occurring is low; risk accepted without mitigation	●	↓	Due to change in procedure, probability is increasing. A change in criteria can require a change to process and potentially delay the project.
D4-042: Unexpected Site Conditions - D4	Conduct early facility walk downs and characterization activities to minimize the schedule impacts; interview "old timers" who worked in or around the facility and compare those events to historic records; conduct document searches to ensure all available documentation is reviewed early in the D4 planning process.	●	↔	No issues at this time.
<b>WSR-006: Decision Document Approval Delays</b>	Work with RL and regulators to establish priorities and need dates.	●	↔	No issues at this time.
<b>WSR-007: More Extensive Contamination Than Expected</b>	Cannot control extent of contamination; no mitigation.	●	↔	No issues at this time.
<b>WSR-008: No Action Waste Sites</b>	Using L-8 table data; no mitigation.	●	↔	No issues at this time.
<b>WSR-021: Remediation Subcontractor Performance</b>	This risk is accepted as written and will be monitored throughout work execution.	●	↔	No issues at this time.
<b>WSR-028: Unexpected Liquid in Pipelines/Tanks</b>	Anticipate liquids in field work plans; include spill response plans in RD/RAWPs.	●	↔	No issues at this time.



## PROJECT BASELINE PERFORMANCE

### Current Month

(\$M)

WBS 040/ RL-0040 Nuclear Facility D&D	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)
U Plant/Other	0.9	1.5	0.6	0.6	62.3	0.9	61.2
Outer Zone	0.0	0.0	0.0	0.0	0.0	(0.0)	0.0
ARRA Total	0.9	1.5	0.6	0.6	62.3	0.9	61.1
Base	1.0	1.0	1.3	0.0	0.0	(0.3)	-31.5
Total	1.9	2.5	1.9	0.6	29.8	0.6	23.9

Numbers are rounded to the nearest \$0.1M

#### ARRA

##### CM Schedule Performance: (+\$0.6M/+62.3%)

ARRA RL-0040.R1.1 U Plant/Other D&D (+\$0.6M) Variance is within reporting threshold.

ARRA RL-0040.R1.2 (\$0.0M) Variance is within reporting threshold.

##### CM Cost Performance: (+\$0.9M/+61.1%)

ARRA RL-0040.R1.1 U Plant/Other D&D (+\$0.9M) Variance is within reporting threshold.

ARRA RL-0040.R1.2 (-\$0.0M) Variance is within reporting threshold.

#### Base

##### CM Schedule Performance: (+\$0.0M/+0.0%)

Variance is within reporting threshold.

##### CM Cost Performance: (-\$0.3M/-31.5%)

Variance is within reporting threshold.



## Contract-To-Date (\$M)

WBS 040/ RL-0040 Nuclear Facility D&D	Budgeted Cost of Work Scheduled	Budgeted Cost of Work Performed	Actual Cost of Work Performed	Schedule Variance (\$)	Schedule Variance (%)	Cost Variance (\$)	Cost Variance (%)	Budget at Completion (BAC)	Estimate at Completion (EAC)	Variance at Completion (VAC)
<b>U Plant/Other</b>	199.3	199.0	191.8	(0.3)	-0.2	7.2	3.6	199.4	192.5	6.9
<b>Outer Zone</b>	<u>84.3</u>	<u>84.3</u>	<u>71.7</u>	<u>0.0</u>	0.0	<u>12.6</u>	15.0	<u>87.3</u>	<u>75.1</u>	<u>12.2</u>
<b>ARRA Total</b>	<b>283.6</b>	<b>283.3</b>	<b>263.5</b>	<b>(0.3)</b>	<b>-0.1</b>	<b>19.8</b>	<b>7.0</b>	<b>286.7</b>	<b>267.6</b>	<b>19.1</b>
<b>Base</b>	<u>71.1</u>	<u>71.2</u>	<u>63.4</u>	<u>0.1</u>	0.2	<u>7.8</u>	11.0	<u>683.5</u>	<u>667.9</u>	15.5
<b>Total</b>	<b>354.7</b>	<b>354.5</b>	<b>326.9</b>	<b>(0.2)</b>	<b>-0.1</b>	<b>27.6</b>	<b>7.8</b>	<b>970.1</b>	<b>935.5</b>	<b>34.6</b>

Numbers are rounded to the nearest \$0.1M

### ARRA

#### CTD Schedule Performance: (-\$0.3M/-0.1%)

ARRA RL-0040.R1.1 U Plant/Other D&D (-\$0.3M) Variance is within reporting threshold.

ARRA RL-0040.R1.2 Outer Zone D&D (-\$0.0M) Variance is within reporting threshold.

#### CTD Cost Performance: (+\$19.8M/+7.0%)

ARRA RL-0040.R1.1 U Plant/Other D&D (+\$7.2M) The positive cost variance is due to several factors including the favorable performance of the Cold and Dark and Sampling and Characterization/Waste Identification Form teams (D4) (+\$4.2M); overhead allocations (+\$11.5 M), less than anticipated resources for Program Management (+\$2.4M) and C-3 Sampling (+\$0.7M); lower than planned costs for capital equipment (D4) (+\$3.0M), and less asbestos abatement required for 200W buildings (+\$3.7M) and minor accounts not within threshold (+0.4M). This is offset by increased material and equipment costs, increased use of masks and respirators due to the unexpected asbestos levels in the ancillary buildings in U Ancillary (D4) (-\$8.2M), coupled with increased insulator staff and the use of overtime to recover schedule, 200E Administration (-\$1.7M) and 209E Project delays (-\$5.1M), less resources required at U Canyon (D4) (-0.3M), and Usage Based Services higher than planned (-\$3.4M).

ARRA RL-0040.R1.2 Outer Zone D&D (+\$12.6M) The favorable cost variance is due to efficiencies in Arid Lands Ecology (ALE), North Slope Facilities, disposition of railcars D&D (+\$7.0M), and Outer Area waste sites (+\$6.7M). The waste site favorable cost-to-date variance is primarily due to an O-Zone Remove, Treat, and Dispose (RTD) Waste Sites adjustments (pass back) to ERDF waste disposal costs reflecting the operational efficiencies of the super dump trucks. Within the waste sites area, this favorable cost variance is partially offset by higher than planned costs associated with remediation of pipelines. A negative cost variance is associated with increased costs for the 212N/P/R Project (-\$1.1M) due to the walls of the basins being much thicker than estimated.



**Base****CTD Schedule Performance:** (+\$0.1M/+0.2%)

All variances are within thresholds.

**CTD Cost Performance:** (+\$7.8M/+11.0%)

Recognized efficiencies for demolition of the Industrial 7 Project (D4) (+\$1.1M) as a result of utilization of existing site equipment and materials, surveillance and maintenance costs (D4) less than expected (+\$2.0M), completion of the sampling of Cell 30 with less resources than planned (+\$0.9M), Program Management utilizing less resources (+\$2.2M), capital equipment (+\$0.3M), Usage Base Services (-\$0.3M), and underrun in overhead allocations (+\$1.6M).

**Contract Performance Report Formats are provided in Appendix A and Appendix A-1.****Estimate at Completion (EAC)**

The BAC and EAC include FY2009 through FY2018.

The changes in EAC from November to December for both ARRA and Base, are within reporting thresholds.

## FUNDS vs. SPEND FORECAST (\$M)

WBS 040/RL-0040 Nuclear Facility D&D	FY2012		
	Projected Funding	Spending Forecast	Spend Variance
<b>ARRA</b>	9.2	9.2	0.0
<b>Base</b>	12.2	12.2	0.0

Numbers are rounded to the nearest \$0.1M.

**Funds/Variance Analysis**

Funding includes FY2011 carryover and FY2012 new Budget Authority.

**Critical Path Schedule**

Critical path analysis can be provided upon request.

**Baseline Change Requests**

None currently identified.

## MILESTONE STATUS

None currently identified.

## SELF-PERFORMED WORK

The Section H. clause entitled, Self-Performed Work, is addressed in the Monthly Report Overview.

## GOVERNMENT FURNISHED SERVICES AND INFORMATION (GFS/I)

None currently identified.

